Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 (previously presented): A display controller for driving a monitor comprising:

a graphics chip for outputting a display data; and

a converter for converting the display data into a display driving voltage, the converter comprising:

a current mirror circuit for generating an output current according to a reference current and the display data, the output current and the reference current corresponding to a mirror ratio, the output current being delivered to the monitor for generating the display driving voltage, the current mirror circuit comprising:

a first current route for delivering the reference current; and

a plurality of second current routes electrically connected to the first current route for delivering a plurality of mirror currents to an output port of the converter to form the output current, wherein the plurality of mirror currents have magnitudes differing from each other by a factor of two, and the plurality of mirror currents add together to form the output current; and

a voltage calibration circuit for modifying the mirror ratio according to the display driving voltage and a reference display driving voltage and adjusting the output current to drive the display driving voltage to approach the reference display driving voltage.

2 (cancelled).

3 (previously presented): The display controller of claim 1 wherein the voltage calibration circuit comprises:

a mirror ratio controller for controlling the mirror ratio;

a comparator for comparing the display driving voltage with the reference display driving

voltage to generate a comparison result; and

a state machine for generating a setting value according to the comparison result and outputting the setting value to the mirror ratio controller to adjust the mirror ratio.

4 (previously presented): The display controller of claim 3 wherein the setting value is used for lowering the mirror ratio if the display driving voltage is greater than the reference display driving voltage, and the setting value is used for raising the mirror ratio if the display driving voltage is not greater than the reference display driving voltage.

5 (original): The display controller of claim 3 wherein the mirror ratio controller comprises a plurality of mirror ratio setting units, and the mirror ratio controller activates a predetermined amount of mirror ratio setting units according to the setting value for adjusting the mirror ratio.

6 (withdrawn): The display controller of claim 5 wherein each of the mirror ratio setting units corresponds to an identical adjustment magnitude when adjusting the mirror ratio.

7 (original): The display controller of claim 5 wherein the mirror ratio setting units correspond to a plurality of adjustment magnitudes when adjusting the mirror ratio.

8 (original): The display controller of claim 5 wherein each of the mirror ratio setting units is electrically connected to the first current route through a current mirror means.

9 (original): The display controller of claim 3 wherein the state machine enters a first operating state for adjusting the setting value to drive the mirror ratio controller to lower the mirror ratio if the comparison result corresponds to a first logic level, and the state machine enters a second operating state for adjusting the setting value to drive the mirror ratio controller to raise the mirror ratio if the comparison result corresponds to a second

logic level.

10 (original): The display controller of claim 9 wherein the state machine will leave the first operating state and enter a third operating state for holding the setting value if the state machine stays at the first operating state, and the comparison result corresponds to the second logic level, and the state machine will leave the second operating state and enter the third operating state for holding the setting value if the state machine stays at the second operating state, and the comparison result corresponds to the first logic level.

11-18 (cancelled)

19 (previously presented): The display controller of claim 1, wherein the converter further comprises a switch module coupled to the plurality of second current routes for controlling the plurality of second current routes respectively to form the output current.

20 (cancelled)